Operation. An incision was made directly over the mass; the contents of the hernia were exposed surprisingly quick; there was not any sac covering a blue black mass that at first appeared to be gut; no fluid surrounded it. On close examination the mass proved to be solid and attached by a pedicle, but closer examination proved the mass to be a small undeveloped kidney attached by its ureter. The femoral canal was enlarged and an attempt made to reduce the kidney, but it was hard to reduce and being afraid that it would give trouble if replaced, the organ was amputated, the ureter cauterized and the wound closed, leaving a couple of strands of silk worm gut as drainage.

The patient stood the operation well, soon recovered from the anesthetic. But it was soon apparent that the relieving of the strangulated kidney did not relieve him either of his vomiting or pain, as both seemed to get progressively worse. The vomitus, which was the first that I had the opportunity to examine, had the appearance and odor that you would expect to find in carcinoma of the stomach. The urine excreted was up to normal in quantity, showing that the kidney removed played a very small part in the secretion of urine. Dressing on the third day showed a clean wound. The patient died on the fourth day.

On examining, the specimen removed showed an undeveloped kidney nearly all sinus surrounded by a thin cortex. On the superior surface was quite a distinct cleft showing the lobulated condition that you find in the kidneys of an infant, weight ½ ounce, length 2 inches, 1 inch broad and about ½ inch thick.

DEPARTMENT OF PHARMACY AND CHEMISTRY.

Edited by FRED I. LACKENBACH.

Serums and Vaccines of the U. S. P. and N. N. R.*

2. Bacterial Vaccines (Bacterins)

The following Bacterial Vaccines described in New and Nonofficial Remedies have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Acne Vaccine.—A vaccine prepared from acne bacilli (Bacillus acnes).

Bacillus Coli Vaccine.—(A suspension of killed bacillus coli communis in physiologic salt solution, with an added preservative).

Bacillus Pyocyaneus Vaccine.—(A suspension of killed bacillus pyocyaneus).

Friedlander Vaccine.—A vaccine prepared from the Friedlander bacillus.

Gonococcus Vaccine.—(A suspension of killed micrococcus gonorrhea (gonococcus of Neisser) in physiologic salt solution, with an added preservative).

Micrococcus Neoformans Vaccine.—A vaccine prepared from micrococcus neoformans.

Pneumococcus Vaccine.—(A suspension of killed diplococcus pneumoniae in physiologic salt solution, with an added preservative).

Staphylococcus Vaccines.—(Suspensions of mixed strains of killed staphylococcus pyogenes albus, aureus, and citreus, in physiologic salt solution, with an added preservative).

Streptococcus Vaccine.—(A suspension of mixed strains of killed streptococcus pyogenes in physiologic salt solution, with an added preservative).

Typhoid Bacillus Vaccine.—(A suspension of killed bacillus typhosus in physiologic salt solution, with an added preservative).

While N. N. R. gives indications for the uses of these various bacterial products, their use is confined to those specific infections to which these various pathogenic organisms give rise. Their applicability should wherever possible, be confirmed by bacteriological diagnosis.

* The first paper of this series appeared in the April, 1911, number of the California State Journal of Medicine.

Bacterial vaccines are conveniently classed as "stock" vaccines, and Autogenous (Homologous) Vaccines.

Stock vaccines are suspensions of killed pathogenic bacteria in physiologic salt solution to which phenol or trikresol has been added as a preservative. They are standardized to represent an approximate number of bacteria to the cubic centimeter. Stock vaccines may represent but one specific organism, or many diverse strains of an organism, in which latter case they are termed "polyvalent" vaccines. Or, they may consist of two or more different organisms, in which case they are termed "mixed" or composite vaccines.

An example of the former (polyvalent) is Streptococcus Vaccine. The streptococcus occurs in various modifications under such widely differing conditions as erysipelas, scarlet fever, and puerperal septicemia. A serviceable stock vaccine should therefore represent strains of streptococci derived from these various sources. If the vaccine does not represent the particular strain responsible for the infection, it is not likely that the vaccine will prove of service. This would characterize the limitations of the stock vaccine, but the case of the streptococcus is rather an extreme example of an organism's proneness to undergo modification. In most other instances differentiation is less marked and stock vaccines frequently have proved as serviceable as those prepared directly from infecting material taken from the individual source. The most extensively employed biological products are prepared from "stock" material, as for example—Diphtheria Antitoxin, Tetanus Antitoxin, Vaccine Virus, the various Tuberculins, and practically everything listed by producers of biological products.

Mixed Vaccines are a recent development in the field of vaccine therapy and their introduction is due to the fact that different types of organisms are found frequently associated in various bacterial infections. It has been observed also, that a pure infection in which but one type of organism is the etiological factor, may develop into a mixed infection, and further, the bacterial flora of a mixed infection may undergo modification in the course of the disease.

While the production of mixed stock vaccines savors of empiricism, their employment in some types of infections has been amply justified. Indeed, it would seem from the present tendency in this field of research that the mixed vaccine, correctly prepared and properly balanced, will become quite the proper thing.

One of the first vaccines of this type to gain prominence is a vaccine composed of killed staphylococci and the acne bacillus. These organisms are frequently found associated in Acne infections. Cultural growths from chronic gonorrheal infections frequently show a variety of organisms, chiefly: gonococci, streptococci, staphylococci, coli bacillus and Micrococcus catarrhalis. A vaccine representing as nearly as may be, the general run of gonorrheal infection, while suggestive of the "shotgun" device, has generally proved more efficacious than the straight gonococcic vaccines. In gonorrheal arthritis, in which the gonococcus alone appears to be the etiological factor, the straight vaccine is more commonly employed.

The pneumococcus, streptococcus and staphylococcus are frequently found associated in diseases of the respiratory tract and in other localized infections. Several mixed vaccines of this type have recently been passed upon by the Council on Pharmacy and Chemistry and included in New and Nonofficial Remedies (Jour. A. M. A., Sept. 9, 1911, p. 902).

While a legitimate field may exist for such products as Mixed Gonorrheal Vaccine, Staph-Acne Vaccine, and possibly a combination of the pneumococcus, staphylococcus and streptococcus, the multiplication of such empirical combinations is a questionable practice and savors rather too strongly of the proprietary nostrum. It is not conclusively established that the indiscriminate introduction of dead

cells or other bacterial products is incapable of doing harm. Is one justified, in an infection calling for large doses of Bacillus coli communis, to administer a vaccine containing proportionately large doses of pneumococci, streptococci and staphylococci, on the assumption that these organisms might in some remote manner be also implicated? Would it not be more to the point to first ascertain the presence of these organisms and the part each plays in the infection? The objection that in acute cases this procedure would occupy too much time can hardly justify the experimenting with an unknown quantity. Resort can be had to emergency measures of established value.

The work of Wright and his associates has leaned perhaps too sharply toward conservatism, but the accurate and painstaking effort of these men has given rise to definite and tangible results. They have demonstrated that the introduction of the dead bacterial cells stimulates the production of various bactericidal substances, as opsonins, agglutinins and bacteriolysins, and that these substances are capable of identification and verification.

The question of dosage is perhaps the most vexed problem confronting the user of bacterial vaccines. Some advocate a minute dosage, continuously increased and avoiding a reaction. Others suggest a dosage just bordering on a reaction, and still others insist that a violent reaction is essential. Then, in the matter of spacing of dosage. Some await the subsidence of the negative and positive phases before administering a subsequent dose; others give smaller doses at frequent intervals, and still others give large doses at intervals of twelve to forty-eight hours. Theoretically, the proper dose is that which will produce a mild reaction and this dose should not be repeated until both the negative and positive phases have subsided, when the dose can be somewhat increased according to the indications. It would seem, however, that other methods of dosage have yielded results where this method has failed. Awaiting the subsidence of a reaction generally gives the spacing of the dosage of from three to seven days.

It is evident that no hard and fast rules can be laid down as to dosage since it is impossible to determine beforehand what degree of active immunity a case is capable of developing, or the resistance of the individual. The tendency is toward larger dosage than that heretofore advocated. It is quite generally conceded that cases of chronic gonorrheal arthritis require a dosage ranging from 50 to 500 million bacteria.

In furunculosis and carbuncle the dose of staphyloccoci may be run up to several billion bacteria. In acne, and streptococcic infections, the tendency is toward more conservative dosage—within a limit of fifty or one hundred million bacteria. The tendency in the case of pneumo, typhoid, and coli vaccines is to employ larger dosage.

Within a radius of a hundred miles of San Francisco there are hundreds of physicians employing bacterial vaccines in their daily work. Many of them are getting good results and are using these products extensively. Others have had no results and want to know the reason why. Why do not more of these men report their experiences to their local bodies and the medical journals? Is it not worth while even though the results may not be announced before the world in glaring headlines? There is an urgent need for reports on the use of bacterial vaccines and biologic laboratories cannot supply satisfactory data without the physician's co-operation.

To quote again from New and Nonofficial Remedies—"Bacterial vaccines are used to aid the production of an active immunity. Great care and skill are necessary for their proper use and no definite statements as to dosage, etc., can be given; the physician must be guided by the condition of the patient and the manner in which the latter reacts to the treatment."

San Francisco, Oct. 24, 1911

PACIFIC COAST OTO-OPHTHALMOLOGICAL SOCIETY.

Notice.

To Members of the Pacific Coast Oto-Ophthalmological Society:

The following letter will explain why the joint session with the Eye, Ear, Nose and Throat Section of the California State Medical Society will not take place this year as advertised, but will be postponed until further notice:

(Copy.)

San Francisco, March 1, 1912.

P. M. Jones, M. D.,
Secretary California State Medical Society.

My Dear Doctor—From our conversation of today I am definitely informed that the Pacific Coast Oto-Ophthalmological Society cannot appear officially at the meeting of the California State Medical Society, because the Pacific Coast Oto-Ophthalmological Society has not made formal request of the Directors of the California State Medical Society. Therefore, we deem it advisable to postpone the meeting of the Pacific Coast Oto-Ophthalmological Society until co-operation can be brought about in a perfectly friendly and harmonious way.

Very truly yours,
CULLEN F. WELTY,
Secretary of Executive Committee.

PROCEEDINGS OF THE SAN FRANCISCO COUNTY MEDICAL SOCIETY.

During the month of February, 1912, the following meetings were held:

Medical Section, February 6th, 1912.

1. Address by Mr. Frank Somers.
2. Address by Mr. C. H. Bentley.

Discussion by Harry M. Sherman, M. D., M. W. Fredrick, M. D., James T. Watkins, M. D., C. G. Kenyon, M. D.

3. The Hemolytic and Bactericidal Powers of "Paraffin" Plasma and Serum. Thomas Addis, M. D. Discussed by Wm. Ophuls, M. D., and L. S. Schmitt, M. D. (This paper will appear in the Journal of Infectious Diseases.)

4. A Plea for the Early Recognition and Proper Treatment of Hemorrhagic Disease in the New Born. E. Charles Fleischner, M. D. Discussed by Langley Porter, M. D., W. B. Lewitt, M. D. H. D'Arcy Power, M. D., A. J. Lartigau, M. D., L. Breitstein, M. D., Thomas Addis, M. D., and E. Charles Fleischner, M. D. (This paper will be published at a later date in the California State Journal of Medicine.)

5. Demonstration of Specimens of Sporotrichosis. Ernest D. Chipman, M. D.

General Meeting, February 13th, 1912.

1. Arthritis Deformans. A. L. Fisher, M. D. Discussed by C. C. Crane, M. D., Julius Rosenstirn, M. D., Langley Porter, M. D., R. B. Scheier, M. D., and A. L. Fisher, M. D.

2. The Sociological Side of Medicine. Philip Mills Jones, M. D. Discussed by Langley Porter, M. D., Raymond Russ, M. D., Julius Rosenstirn, M. D., and Philip Mills Jones, M. D.

Surgical Section, February 20th, 1912.

1. The Choice of an Anesthetic. Caroline B. Palmer, M. D.

2. The Present Status of Nitrous Oxide in Major Surgery. Mary Botsford, M. D.

3. A Practical and Simple Method of Maintaining Respiration During Operations Involving Opening of the Chest Cavity. Sterling Bunnell, M. D. (This paper is to be published in J. A. M. A.)

General discussion by Edith Hammond Williams, M. D., Mary Murphy, M. D., Dudley Tait, M. D., W. I. Terry, M. D., Harry M. Sherman, M. D., Caroline B. Palmer, M. D., Mary Botsford, M. D., Sterling Bunnell, M. D.